Docket #: IR-2310 (2-3711)
Title: CONTROL IC FOR LOW POWER
AUXILIARY SUPPLIES
Inventor: Edgar ABDOL (202) 202 0700

Contact: James A. Finder (212) 382-0700 Drawings: 25 Sheets (Figs. 1-20)

Figure 1 – Prior Art

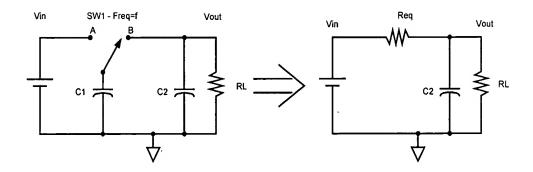


Figure 2 – Prior Art

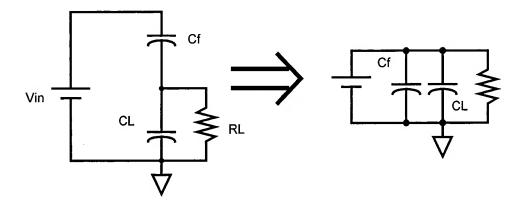


Figure 3 - Prior Art

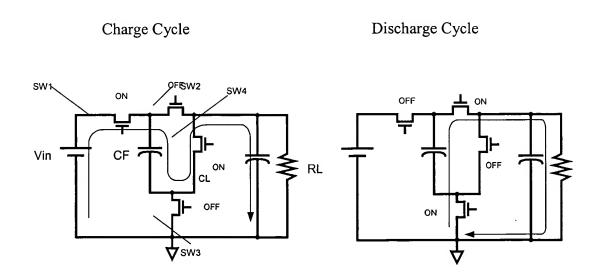


Figure 4

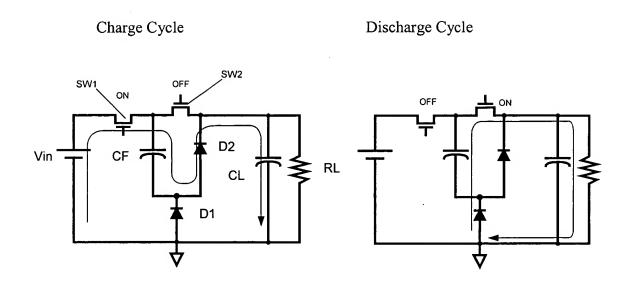
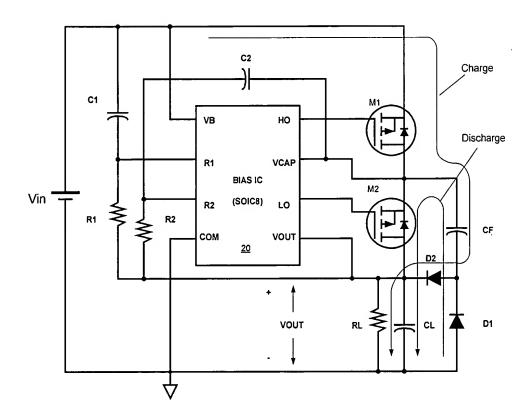


Figure 5a



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Figure 5b

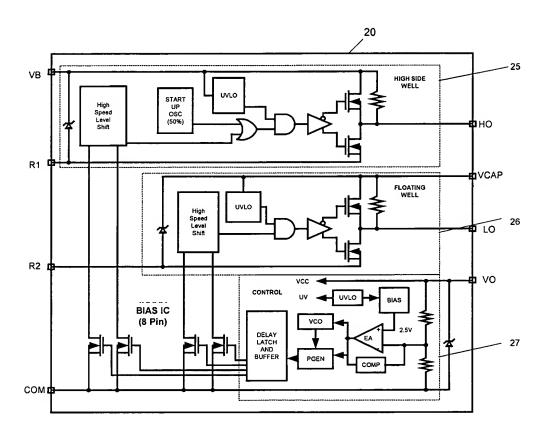


Figure 6

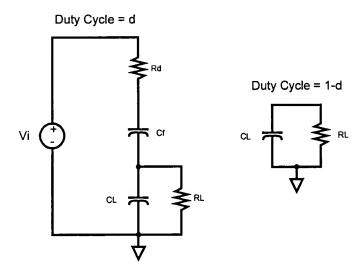
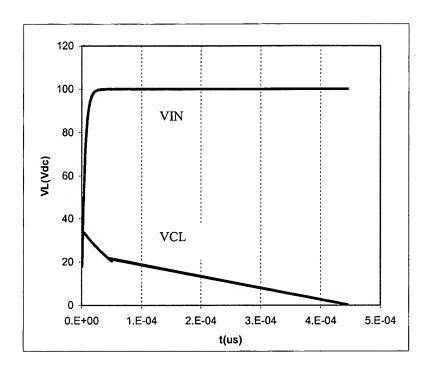
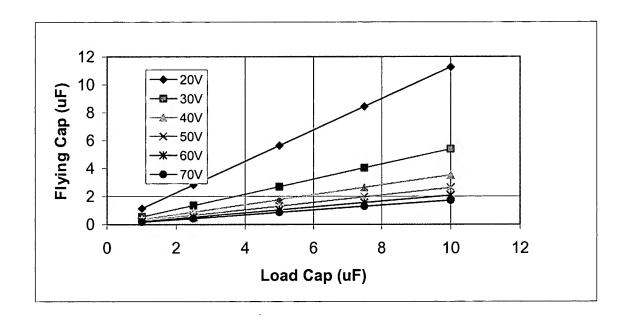


Figure 7



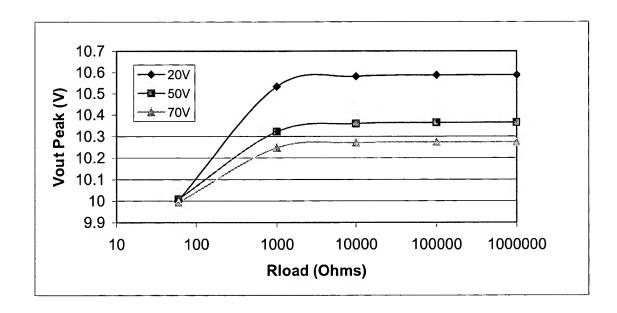
## Figure 8a



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Figure 8b



## Figure 9

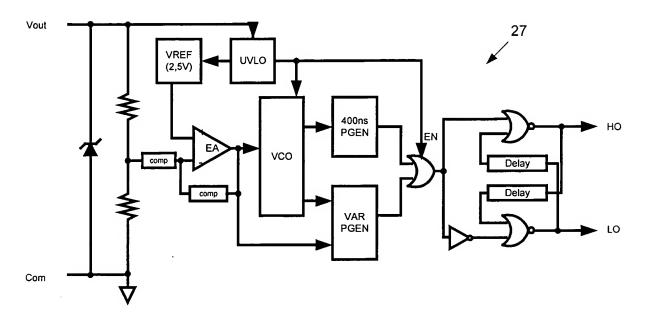


Figure 10

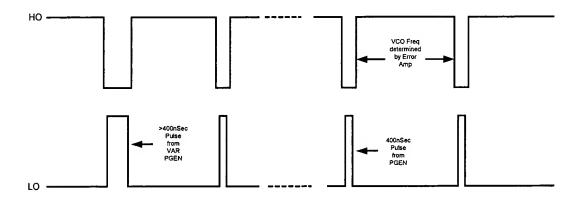
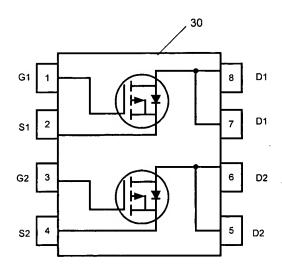


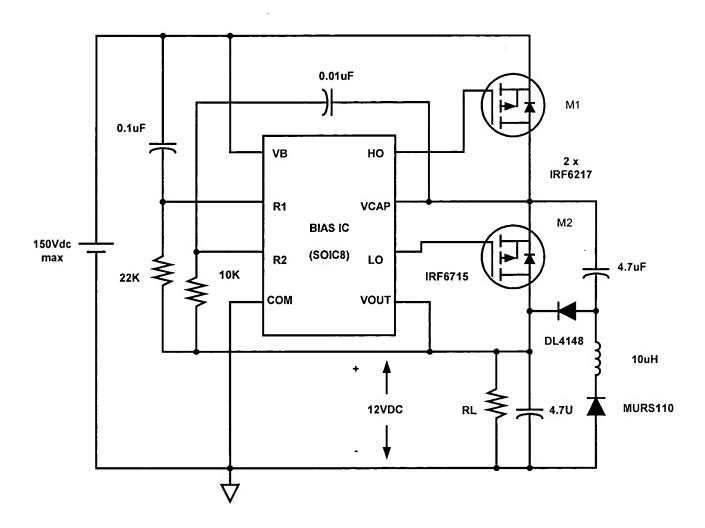
Figure 11a



**AUXILIARY SUPPLIES** Inventor: Edgar ABDOULIN

Contact: James A. Finder (212) 382-0700 Drawings: 25 Sheets (Figs. 1-20)

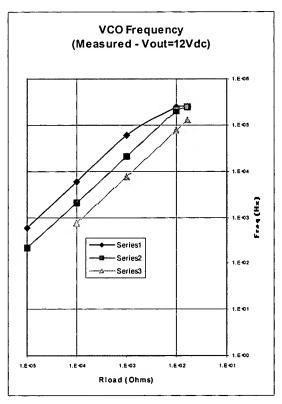
Figure 11b



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Figure 12 – Verification of operating range



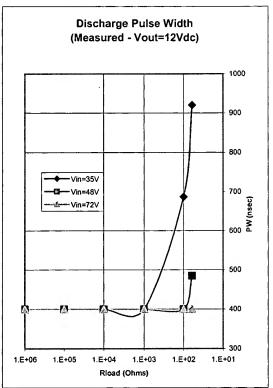
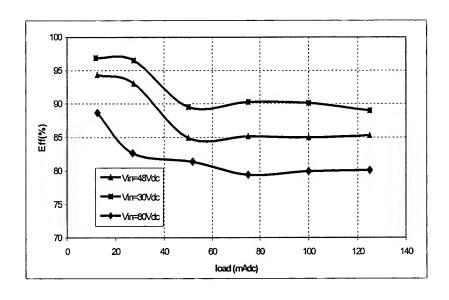


Figure 13



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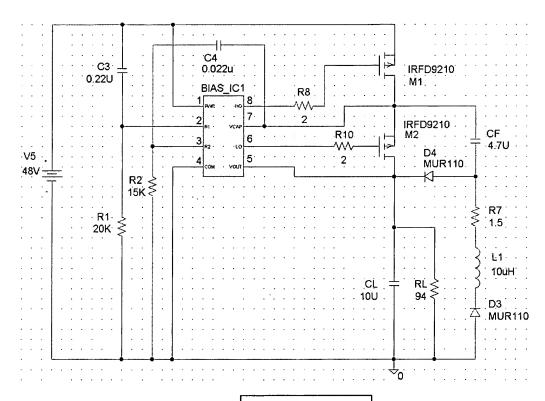
Title: CONTROL IC FOR LOW POWER

AUXILIARY SUPPLIES Inventor: Edgar ABDOULIN

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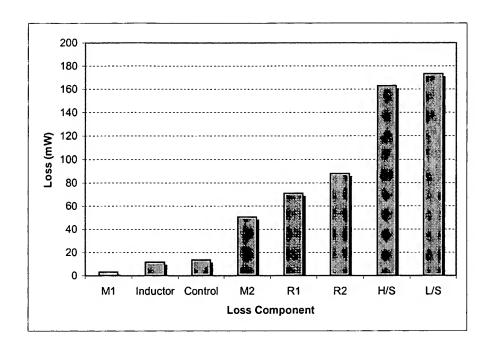
Drawings: 25 Sheets (Figs. 1-20)

### Figure 14a



Vin=48V Iin=42.2mA Vout=11.7V Load=94 Ohms Pin=2.027W Pout=1.461 Eff=72.1%

Figure 14b



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Contact: James A. Finder (212) 382-0700 Drawings: 25 Sheets (Figs. 1-20)

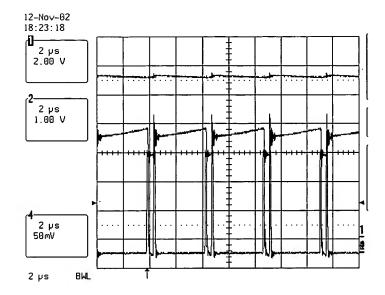


Figure 15a: BIAS IC Waveforms

CH2: M1 drive CH4: M2 drive

CH1: Output voltage

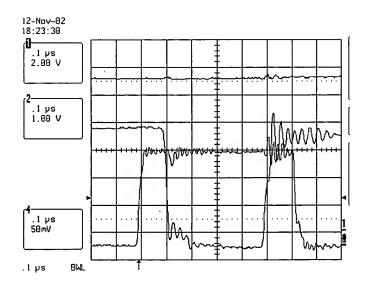


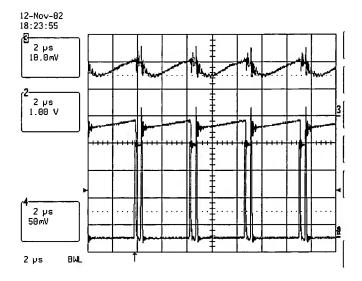
Figure 15b: BIAS IC Waveforms (Expanded)

CH2: M1 Drive CH4: M2 Drive CH1: Output voltage

AUXILIARY SUPPLIES

Inventor: Edgar ABDOULIN

Contact: James A. Finder (212) 382-0700 Drawings: 25 Sheets (Figs. 1-20)



# Figure 15c: BIAS IC Waveforms

CH2: M1 Drive CH4: M2 Drive CH3: Input current

(10mA/div)

Figure 16

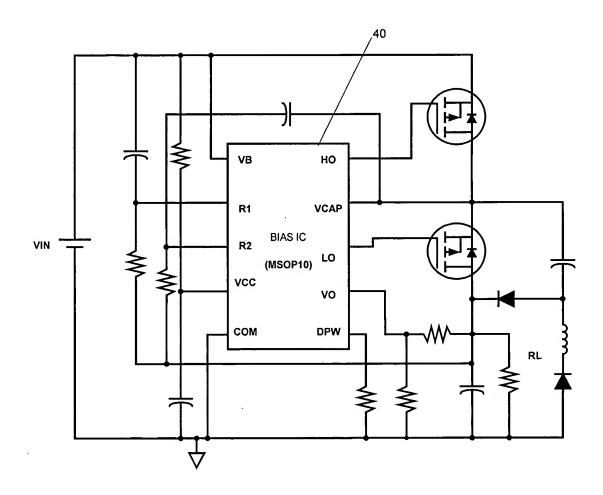


Figure 17

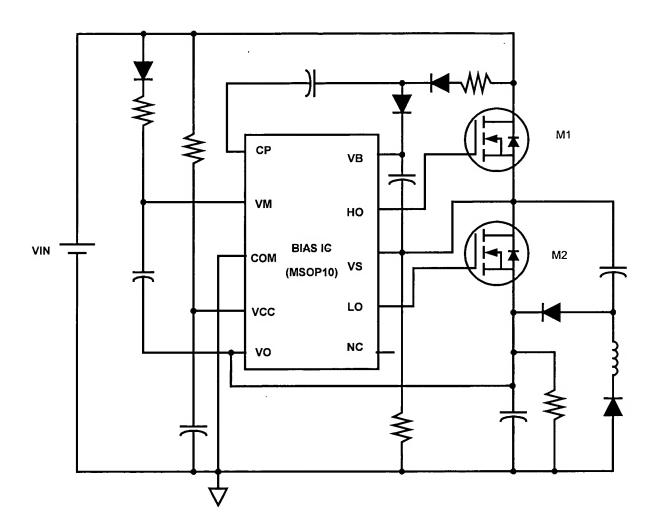
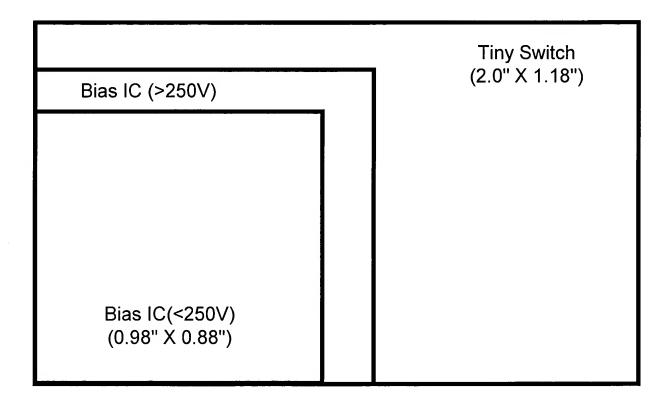


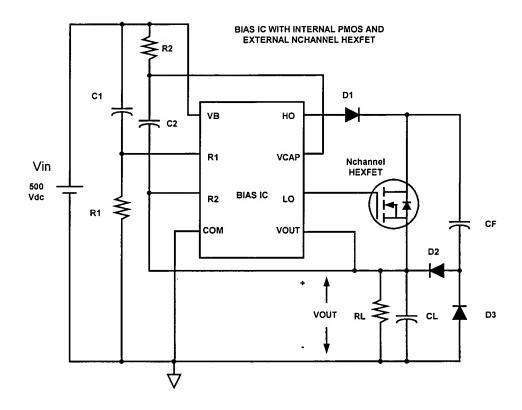
Figure 18



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Drawings: 25 Sheets (Figs. 1-20)

Figure 19



**AUXILIARY SUPPLIES** 

Inventor: Edgar ABDOULIN

Contact: James A. Finder (212) 382-0700 Drawings: 25 Sheets (Figs. 1-20)

## Figure 20

